REMARKS

Reconsideration and allowance of the application based on the foregoing amendments, and for other reasons, is respectfully requested.

The above-identified divisional patent application contained claims 7-25. All were rejected.

Claims 22-25 are canceled herewith. Claims 7-21 remain pending.

Claims 7 and 9-25 were rejected under 35 USC 103(a) as being unpatentable over Hirota (JP406063093) in view of Perlman (4,998,006), the Examiner opining that Hirota "teaches substantially the claimed invention". Applicants beg to differ!

While Hirota may teach a sauna for causing a user to sweat, provide plural heat sources 2 in the lower portion of the floor consisting of a far infrared radiator 1, and subject heat generated from the heat source to electromagnetic radiation into a sauna room through the far infrared radiator 1, he does not teach "substantially the claimed invention". Claim 7 requires an infrared heater inter alia "comprised of two sets of parallel electrically-resistive bars, the corresponding bars of respective sets being juxtaposed, electric conductors interconnecting corresponding ends of the bars". Hirota does not show "two sets of parallel electrically-resistive bars", let alone "the corresponding bars of respective sets being juxtaposed". Nor does he show "electric conductors interconnecting corresponding ends of the bars.

And Perlman does not make up for any of these deficiencies in Hirota. While Perlman may show heating elements that can be used in heating panels where the device is brought into proximity with the human body, he too does not show what claim 7 requires and Hirota lacks: an infrared heater inter alia "comprised of two sets of parallel electrically-resistive bars, the corresponding bars of respective sets being juxtaposed, electrical conductors interconnecting corresponding ends of the bars, and connectors for applying 180 degree out of phase electrical current to the respective sets of conductors so that current flow in opposite directions in corresponding bars at any given point in time". All he teaches is that one set of wires be constructed and arranged to carry electric current in a first direction through the heating element, and another set of wires be constructed and arranged in a parallel circuit to the first set to carry electric current in the opposite direction through the heating elements, the wires having equal impedance such that any

magnetic field generated by one set of wires is reduced or eliminated by an opposing magnetic field generated by the other set. He too does not teach having two sets of parallel electrically-resistive bars, the corresponding bars of respective sets being juxtaposed, electrical conductors interconnecting corresponding ends of the bars, and connectors for applying 180 degree out of phase electrical current to the respective sets of conductors so that current flow in opposite directions in corresponding bars at any given point in time.

Wherefore, it is urged that the specific structure required by claim 7 clearly distinguishes it patentably over the references Hirota and Perlman and any combination thereof.

Claim 9 is directed to a "finned infrared source comprised of a base adapted to be heated to uncomfortable-to-the-touch but sufficiently-high temperatures to provide effective infrared radiation, and closely-spaced protrusions of a low heat-conductance material which project away from the base and present temperatures comfortable to the touch even though the base is at uncomfortable temperatures". Neither Hirota nor Perlman show such a structure. Hirota's infrared radiation radiator1 (Figures 1 and 5) is not finned and its base does not appear to be heated "to uncomfortable to touch" temperatures, for he has apparently has an air ventilation device 6 (Figure 3) (Item 3 in Figure 1) consisting of a plate-like member 7 having many through holes 8 between the upper side of a heat source 2 and the infrared radiator 1 which would seem to preclude an uncomfortable-to-the-touch temperature in its base. Hirota's circulating air would appear to keep his infrared radiator 1 cooled.

Perlman does not make up for the deficiencies in Hirota. Accordingly, it is urged that claim 9 distinguishes patentably over the references Hirota and Perlman and any combination thereof.

Claim 10 is directed to a "finned infrared source according to claim 9, wherein the protrusions are fins separated by less than finger width". Being more specific than claim 9, and untaught by the references, it is allowable therewith.

Claim 11 is directed to an "infrared heater according to claim 7, and a protrusioned infrared source comprised of a base adapted to be heated to uncomfortable-to-the-touch temperatures, and protrusions which project away from the base and present temperatures

comfortable to the touch when the base is at uncomfortable temperatures". Thus it combines the allowable subject matter of claim 7 with that of claim 9. Thus it would appear to be doubly allowable.

Claim 12 is directed to an "infrared heater according to claim 11, wherein the protrusions are separated by less than finger width". Thus claim 12, dependent on doubly allowable claim 11, is deemed further allowable, the art being devoid of any such teaching.

Claim 13 too is dependent on doubly-allowable claim 11, and further requires that "the protrusioned-infrared-source base is finned and has valleys between the fins, and the valleys overlie corresponding electrically-resistive bars". Thus the claim defines an additional structural organization untaught by the references, and too should be allowed.

Claim 14 is dependent on claim 13, and further requires that "the fins are separated by less than finger width", a feature already identified above as untaught by the art.

Claim 15 too is dependent on claim 13, and further requires "a panel for spacing the heater from any wall on which it may be mounted". Thus more structure is required, and it is urged that this claim is allowable with claim 13.

Claim 16 is dependent on claim 15, and further requires that "the panel is corrugated and its ridges underlie corresponding resistive bars". Reciting novel additional structure, it is clearly allowable with claim 15.

Claim 17 is dependent on claim 16, and further requires "the fins are separated by less than finger width", a new feature already discussed above.

Claim 18 is dependent on claim 17, and further require "a cabinet having a door mounting the heater on the inside". Requiring additional structure, claim 18 is allowable with claim 17.

Nor do Hirota and Perlman and any combination thereof teach the steps required by applicants' method claims. Applicants' method claim 19 is directed to a method of sweating a person, comprising primarily heating the person by direct infrared radiation absorption.

Hirota does not teach "substantially the claimed inventi0on", that is sweating a person by "primarily heating the person by direct infrared radiation absorption". Hirota's infrared radiator 1 is below the feet of a sauna occupant, and below that are his heat

sources 2 with which he not only heats his infrared radiator 1 but also the ambient air which rises through his ventilation device 6 and radiator 1 for "emitting it to the upper part". Considering the location of his infrared radiator 1 and his heat sources 2, it is submitted that Hirota is not "primarily heating the person by direct [underlineing added] infrared radiation absorption". This is believed corroborated by Hirota's statement that "An air ventilation device 6 consisting of a plate-like member 7 having many holes 8 is provided in a suitable position on the upper side of these heat sources 2, so that high temperature air generated by the heat source is dispersed and emitted to the upper part. In such a way, a temperature in the sauna room is equalized easily". Thus, it is urged that Hirota does not primarily heat a person by direct infrared radiation; he may partially heat a person by direct infrared radiation, but not primarily; his heating of the person must primarily be by heated air, considering both the location of the infrared sources below his feet and his heated air problems.

Perlman is not concerned with sweating a person; there is not even a suggestion that he might remotely be. Nor is he "primarily heating a person by direct infrared radiation".

Thus, Perlman does not make up for Hirota failure to "primarily" heat "a person by direct infrared radiation".

Nevertheless, to expedite the prosecution of this application, applicants have amended claim 19 to require "primarily heating the person by direct infrared radiation absorption on several sides". Applicants' sauna heats a person on two or more sides. Hirota at best only heats a person by direct radiation from the bottom side. Perlman only heats a person from the top side.

As amended, Claim 19 is clearly patentable over any combination of Hirota and Perlman, and should be allowed.

Claim 20, dependent on claim 19, further requires the step of "shielding the person from physical contact with uncomfortable temperatures in the source of the infrared radiation by distancing the person therefrom by protrusions thereon precluding contact therewith". Being more inclusive than claim 19, it is allowable therewith.

Claim 21, dependent on infrared-heater claim 7, further requires "a shield overlying the heaters and having low-heat-conductance protrusions extending away

therefrom to protect a user from high temperatures in the heater". Being more inclusive than claim 7, it is allowable therewith.

Hirota in view of Perlman does not teach a structure that is inherently capable of use as set forth in claims19 and 20. As stated in MPEP 2131.01(III): "Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill". Applicants submit that Perlman does not make clear that the missing descriptive matter in Hirota is necessarily present in Hirota. Neither Hirota nor Perlman teach a method of sweating a person comprising primarily heating the person by direct infrared radiation absorption. Applicants are the first to invent that concept. There is no evidence to the contrary.

Claim 8 was rejected under 35 USC 103(a) as being unpatentable over Hirota in view of Perlman and further in view of Grise et al (4,485,297), the Examiner first alleging that "Hirota in view of Perlman teaches substantially the claimed invention". As indicated above, applicants contend that Hirota in view of Perlman do not teach the claimed invention of base claim 7.

The Examiner then acknowledges that "they [Hirota and Perlman] do not disclose that heaters are comprised of an electrically-insulating substrate", but states that "Grise discloses heaters having a substrate 12 sealed between a pair of plastic sheets 23 and 24" and that "It would have been obvious --- to modify the invention of Hirota and Perllman to include plastic sheets being bonded well to create an electrically-insulating substrate as taught by Grise (Col.3, lines 28-40)".

Initially, applicants wish to observe that claim 8, being dependent on patentable claim 7, should be allowed therewith.

Additionally, applicants wish to note that claim 8's further limitation requires that "the two sets of parallel electrically-resistive bars are mounted on opposite sides of the same thin electrically-insulating substrate". As the Examiner realizes, this structure is not found in the two references: "they [Hirota and Perlman] do not disclose that heaters are comprised of an electrically-insulating substrate".

But the claim is even more specific. It requires that "the two sets of parallel electrically-resistive bars are mounted on opposite sides of the same thin electrically-insulating substrate". This Grise et al do not teach.

The concept of the two sets of parallel electrically-resistive bars mounted on opposite sides of the same thin electrically-insulating substrate, with "the corresponding bars of the respective sets being juxtaposed electric conductors interconnecting corresponding ends of the bars, and connectors for applying 180 degrees out of phase electrical current to the respective sets of conductors so that current flows in opposite directions in corresponding bars at any given point in time" per claim 7, eluded Grise et al, too. Grise et al may have two plastic sheets, but he only has circuits on one side of a substrate. No one thought of juxtaposing corresponding heater bars, with current flowing in opposite directions, on opposite sides of a substrate, to nullify electromagnetic waves, before applicants did!

Applicants claim 8 recites further invention.

Claims 22-25 are newly canceled herewith.

Applicants wish to thank the Examiner for the prior art made of record and not relied upon. Applicants believe that their claims define patentably thereover.

Wherefore applicants submit that this application is in condition for allowance, which favorable action at an early date is earnestly solicited

Respectfully submitted

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